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ABSTRACT

The Rutgers Train the Trainer Program (RTTP) is a 2-day intensive workshop for teaching noncareer prospective teachers. Seven essential principles of the program are as follows: (1) teachers of prospective teachers should model the elements of effective teaching; (2) teachers should adopt an overall approach to their students that centers on mutuality and joint purpose; (3) teachers should strive to create a sense of group belonging among the participants; (4) teachers should use a range of whole group, small group, and individual teacher-student approaches to teaching; (5) teachers should develop content by building on the contributions of the students; (6) practice teaching for prospective teachers should be real, not simulated; (7) teachers of prospective teachers should provide meaningful feedback during coursework and after each practice teaching experience. Student training objectives are skill acquisition and knowledge including (1) an understanding of the characteristics of desirable two-way communication; (2) strategies for effective teacher questioning and fielding of student talk; (3) the characteristics of three basic strategies of teaching--presenting, enabling, and exemplifying; (4) understanding of the relationships occurring within the triad of teacher, student, and subject matter; (5) the role of analogies, anecdotes, metaphors, examples, and parallel cases in giving explanations; (6) the fundamental questions to answer when preparing a lesson plan; and (7) ability to prepare various types of audiovisual materials and understand their role in the classroom. (A 13-item reference list is attached.) (NLL)

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Rutgers Train the Trainer Program: Teaching Noncareer Prospective Teachers How to Teach*

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It is one thing to teach the skills of teaching to undergraduate and graduate students who have chosen teaching as their career. It is quite another thing to teach the skills of teaching to students who are professional tax assessors, electrical inspectors, plumbing inspectors, municipal clerks, directors of public works, and other such local government officials. It is quite different to teach the latter group of students in that such prospective teachers, who participate in the Rutgers Train the Trainer Program for two intensive days, do not see themselves as career teachers at all. They will continue as government officials performing the tasks they are teaching their students to perform. These noncareer teachers will teach their peers about the regulation and enforcement of state and

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municipal codes. They will teach highly technical material related to their fields to their peers who seek self-improvement and possible career advancement. Moreover, although these noncareer prospectives will be teachers, they have no formal training as educators. Indeed, a few of them have not been in a formal classroom setting since the day of their high school graduation.

These prospective teachers view their future teaching duties as a payback service to their profession, or as a means to earn some extra "moonlighting" income, or as a status symbol vis-a-vis their peers, or as a combination of all of these aspects. Whatever the motivation of the students who attend the Rutgers Train the Trainer Program (RTTP), teaching these students how to teach in a compact two-day retreat atmosphere requires a philosophy and approach to teaching about teaching which is different from our usual task of teaching university students once or twice a week over the course of a full semester.[1]

The RTTP sessions are held at the Rutgers Continuing Education Center. The training program is under the administration and guidance of the Rutgers Department of Government Services. The department serves the needs of municipalities across the State of New Jersey for the continuing education of its personnel. In establishing RTTP as part of its programs for state and local government personnel, the department stated that its goals are to "increase the technical competence"

and to "stimulate an attitude of professionalism among public officials and employees in New Jersey."[2]

In light of our understanding of these goals established for RTTP, we designed a theory-based program in conjunction with the coordinators of the various out-reach aspects of the Rutgers Department of Government Services. The philosophy and the approaches which guide RTTP reflect our response to the special needs of these noncareer teachers. Seven essential principles underpin the content and teaching strategies that we utilize.

1. **Teachers of prospective teachers should model the elements of effective teaching which constitute the core of their messages to their students.**

We are aware that as we teach our students we send strong nonverbal messages about teaching by the very way we interact with them. That is, since we advocate an approach for adult education which builds on student experience, student diversity, and student involvement while recognizing the attributes which adults bring to their classwork, we strive to implement what we advocate. We believe that the quality of the interaction between student and teacher, as well as the climate of the learning environment, significantly influences what adults will learn in continuing education.[3] It is the teacher who in great measure determines the nature of the verbal interaction and tone of the classroom. Therefore, it is important for us as teachers to take care in establishing an atmosphere of acceptance of the students as they are and for what they say, to manifest a seriousness of

purpose and a competence in subject matter which respect the students' investment of two days of their time (one day at their bosses' expense and one day at their own expense), and to demonstrate a love for teaching and a pride that comes from teaching skillfully. This means, no self-hate; no slurs on the profession of teaching; and no denigrating of students and teachers in general. Based on these ideas we believe that we should strive to have our verbal and nonverbal messages congruent with each other. In short, an adaptation of an old Midwestern rhyme sums up our position appropriately: Roses are red, violets are blue; we'll teach you to teach by the way we teach you.

2. **Teachers, especially teachers of adult prospective teachers, should adopt and strive to implement an overall approach to their students which centers on mutuality and jointness of purpose.**

This principle is in opposition to the unilateral approach to influencing student behavior which predominates in most classrooms and training programs. The unilateral approach is essentially what Argyris and Schon identify as Model I behavior while the bilateral approach which we advocate is essentially what Argyris and Schon identify as Model II behavior.[4]

The key to adopting a bilateral approach to teaching prospective adult teachers lies in utilizing strategies which emphasize and encourage interdependence among the teacher and the learners. Accordingly, this approach emphasizes shared decision making, joint responsibility for the tasks to be accomplished,

and an interaction characterized by openness and trust. We believe that this mutuality encourages a collaborative environment which is most conducive to learning.

3. **Teachers should strive to create a sense of group and group belonging among the unrelated, individual participants.**

A positive group feeling is important, especially for intensive, short-term teaching because the participants need a support system from their peers in addition to professional encouragement and instruction from their teachers, as they embark on a new endeavor which challenges them. In the RTTP the sense of group arises from common group activities, the use of name tags and name plates, the identification of participants by personal name and by group name, the sharing of breaks and meals together, and the "piggy back" sharing of ideas and solving of problems which face the group. The sense of group also arises from the cooperative learning approach which we will discuss next. But whatever the source and whatever the motivation a sense of group is significant in providing support, identity, and incentive for the individual, heretofore unconnected participants.

4. **Teachers should utilize a range of whole group, small group, and individual teacher-student approaches to teaching so as to permit students to have the advantages of learning from their teachers and the classmates in a variety of settings.**

Students are social creatures, and they have different learning styles, different needs, different expectations, and different futures ahead of them. Therefore, it is important for

teachers to go beyond the usual organization of students into one whole group, all interacting simultaneously with the teacher. Teachers, for their own good as well as the ultimate benefit of their students, should employ cooperative learning techniques, peer teaching, and individual conferences with their students. Indeed the advantages of small cooperative learning groups are documented in the recent research literature.[5]

5. **Teachers should develop content by building on the contributions of the students.**

To avoid the pitfalls of (1) neglecting or dismissing the valuable life experiences which adult students bring to the classroom and (2) appearing as vain, "know it all" academics who can tell people in the field the best way to conduct their lives it is important to elicit contributions from the participants and then to use those contributions as the springboard for teaching the content of the program. That is, teachers should in the long term present their material by reacting to the contributions of their students. This practice will also help the teacher to establish a positive connection with the students. The teacher demonstrates to the students that their experiences do count. Furthermore, this practice shows that the teacher is listening to the students and is accepting their comments and contributions to the class.[6]

6.**Practice teaching for prospective teachers should be real teaching, not simulated teaching.**

While we advocate and utilize simulations in teaching as extremely beneficial to students, we believe that prospective teachers need to utilize what they have learned in RTTP as they actually teach. Such utilization is in addition to simulations and in addition to their planning of lessons and materials and to their discussing what they project their students will be like. Talking about teaching, planning for teaching, and pretending to teach are not substitutes for an actual teaching experience. Therefore, we include and emphasize an actual teaching experience even though it is impossible for our prospective teachers in an intensive training program on the Rutgers University campus to teach their own or similar prospective students. We do so by having our students actually teach each other some material based either on their professional experience or their personal life experience. We schedule each student to teach during the second day of the program. In anticipation of this on the first day we prepare our students for their teaching experiences and help them to employ the effective teaching approaches we have taught them explicitly and implicitly.

7. **Teachers of prospective teachers should provide feedback that is meaningful and helpful during coursework and especially after each practice teaching experience.**

The purpose of feedback is to alert the prospective teachers to the nature of their behavior, the effects of that behavior, and the perceptions that we as professionals have of that behavior. Prospective teachers are often not fully aware of how

their performances are affecting other people. They need feedback, therefore, so that they can become sensitive enough to adjust their behavior in the future to match the needs of their situations and their own expectations. Feedback designed to be meaningful and helpful is an essential element in the development of the prospective teacher.

We believe that guidelines for meaningful and helpful feedback direct the feedback giver to emphasize, among other points, (1) a focus on actual performance rather than on the receiver's personality, (2) a focus on observations rather than assumptions, inferences, or explanations, (3) a focus on the specific and concrete rather than the general and abstract, (4) a focus on possible acceptable alternatives rather than "the one" best path, and (5) a focus on what is manageable and modifiable by the receiver.[7]

Within the framework of the goals of the program established by the Rutgers Bureau of Government Services and our own beliefs regarding the approaches to teaching noncareer teachers, we also determined what content should be taught in these brief two-day sessions. We established seven objectives for the content of instruction. Accordingly, by the end of the training program the prospective teachers should acquire skills and knowledge which include:

1. An understanding of the characteristics of desirable two-way communication between teacher and students and among students.

2. Some strategies and tactics for effective teacher questioning and teacher fielding of student talk.

3. The fundamental characteristics of three basic strategies of teaching -- presenting, enabling, and exemplifying.

4. An understanding of the relationships occurring within the triad of teacher, student, and subject matter.

5. The role of analogies, anecdotes, metaphors, examples, and parallel cases in explaining things to students.

6. The fundamental questions which need to be answered when preparing a lesson plan.

7. The skill of preparing various types of audio-visual material and an understanding of the proper role of audio-visual material for classroom teaching.

Based upon the above goals, principles, and objectives, the two-day Train the Trainers Program follows a planned sequence of activities and discussions. We start with a structured activity. Depending upon the composition of the group we select an activity which emphasizes either the importance of communication in teaching, ("One-way/Two-way Communication"), or the importance of communication and cooperation among the teacher and the students, ("Colored Broken Squares").[8] Each activity requires the involvement of all of the participants.

For example, let us briefly explain the "One-way/Two-way Communication" activity:[9]

A volunteer from the group is given the task of describing a figure (Figure A) to the other participants; the participants must draw the figure according to the description given. The volunteer faces away from the group, and must describe the figure verbally. That is, he or she may not draw the figure or use any type of visual aids. Also, the participants may not ask any questions or make any comments. Thus, the communication from the volunteer to the other participants is "one-way." When the task has been completed, we record the time it took to complete the task and ask the participants to estimate the number of parts of the figure which they were able to draw correctly.

Next, the process is repeated. The same volunteer has the task of describing a <u>different</u> figure (Figure B) on a separate sheet of paper for the participants to draw. However, this time the volunteer faces the group and the participants are able to ask questions. That is, the communication between the volunteer and the participants is "two-way." Again, we record the time it took to complete the task and ask the participants to estimate the number of parts of the figure which they were able to draw correctly. Then we show the drawings used by the volunteer. We ask the participants to score their two figures for the actual number of parts of each figure which they drew correctly.

The two figures look like this (enlarged several times):

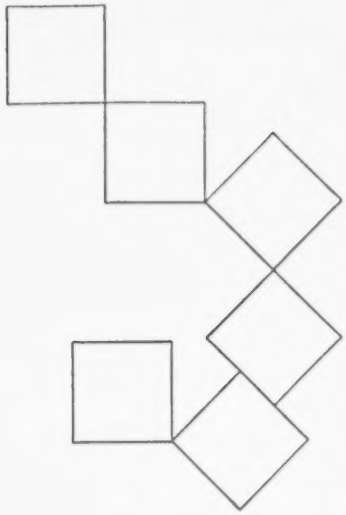

Figure A

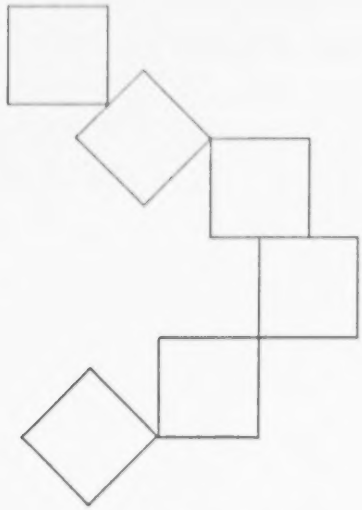

Figure B

On the chalkboard, we record via a handcount the estimates for the number of correct figures, the actual number of items correct, the time it took to complete each figure, and the total number of people who participated. The table we use is illustrated below. We have also included sample data in the table. These data were collected during an actual RTTP session in May 1988.

		FIGURE A		FIGURE B	
		# People Estimating Correct	*# People Actually Correct*	*# People Estimating Correct*	*# People Actually Correct*
Number of Items Correct	0	0	2	0	1
	1	2	3	0	0
	2	3	4	2	3
	3	1	5	1	2
	4	3	1	3	1
	5	3	0	2	2
	6	3	0	7	6
Total Number of People		15	15	15	15
		Took 2½ minutes		Took 4 ¾ minutes	

The processes of completing this activity and collecting the data set the stage for discussion. Essentially, we follow a strategy for a debriefing discussion. The plan of such a discussion includes the following questioning strategy:

1. What happened? That is, what are some of the specifics that occurred to you during the activity, such as events you observed, decisions you made, and feelings you had?

2. What did you learn about the situation, yourself, and other people from the activity?

3. What are the key ideas that this activity teaches us?

4. In what ways are the actions, rules, events, facts, and outcomes of this activity similar to other parts of your life and especially to teaching?

5. What do you conclude from all of these actions and points made?[10]

In discussing the responses to the first question, "what happened?," the participants, focusing initially on the data presented in the table, work first in small groups and then as a full group. Sample comments regarding the "One-way/Two-way" activity (based upon the data above) include:

* "Figure B took longer than Figure A."
* "There was higher success in B than A."
* "Estimates were more accurately matched in B than A."

As the discussion proceeds, additional comments from the participants may include statements such as these:

* "When Joe [the volunteer] was turned away I was not paying attention as much. When he faced us I think the communication was better."

* "I assumed I understood him, but I really did not."

* "I had trouble because he was giving directions using north, east, south, and west and I got really confused."

* "When I could ask a question 'cause I wasn't sure of what he said, I felt a lot better--more secure."

* "Yeah, he also said one figure was shaped 'like a railroad crossing sign.' Actually none of the figures is in that shape. So I was really mixed up."

The points raised in this discussion form the basis for instruction as it continues through the day. We build upon these points related to one-way/two-way communication and extend them into areas such as: the encouragement and use of student questions, tactics for asking questions and fielding student responses, the use and mixing of three different teaching strategies (presenting, enabling, and modeling[11]), and the skills for conducting classroom discussions. We emphasize the interrelationships within the triad of the teacher, the student, and the subject matter and how these relationships affect teaching strategies and tactics. As we continue through the day, we demonstrate the correct use as well as the value of audio-visual aids. Also, during the day as points arise about various skills of questioning and fielding, we conduct

mini-training exercises which give the participants opportunities to practice the skills being discussed.

Most importantly, in order to give our students the opportunity to utilize the suggestions we offer, we include a practice, actual teaching session on the second day of the training program. We also provide time for the students to work together to plan their practice teaching and develop audio-visual aids to use in their lessons. Here they use the materials they have brought with them and the audio-visual items we supply. We emphasize that the students are to teach a lesson to their peers in the group. That is, when their turns come, they do not say, "This is how I'd teach in September...." They do teach an actual fifteen-minute lesson. Our prospective teachers teach lessons to their fellow students about a range of topics including building codes, safety procedures, government forms, and ways of dealing with the public.

The practice teaching session poses real challenges to these noncareer teachers. We encourage them to break away from their familiar strategy of teaching (primarily a lecturing, or "presenting," strategy[12]) and practice a new, eclectic strategy which will encourage teacher-student and student-student interaction. This is true for those members of the group who have had some moderate experience in teaching as well as the 100% neophyte teacher. We urge them to practice effective questioning strategies and fielding tactics. We require them to include the use of at least one audio-visual aid in their lessons.

Essentially, then, we expect the students to change the way they teach so as to increase student involvement in their lessons. We do so because feedback from the field indicates that the most serious complaint of students concerns the lack of student involvement in the courses offered by such teachers.

We ask much from these prospective teachers and they respond amazingly. We conduct the training program so that it is likely that they will be successful, and most do succeed. We attribute their success to the fact that we model the type of teaching strategy which we expect our students to implement. We foster an interactive classroom through discussion and questioning strategies. We facilitate student learning in both large group and small group activities. Usually, often early in the afternoon of the first day, the students remark, "You're doing exactly what you expect us to do!" The message is clear--we practice what we preach.

Additionally, as a result of increased student involvement and interaction in the training program the students get to know one another. Through this process, we are able to foster a positive interpersonal climate among the participants. This is extended as we spend the two days together, taking breaks, and sharing breakfast, lunch, and dinner. By the evening, the participants are working together to help one another plan their lessons and make audio-visual aids. It then becomes particularly easy for us to encourage our students to try new teaching strategies. They know that we and their peers will support them

and that it will be safe to take a risk. Indeed, our adult learners experience cooperation and are reasonably sure that they can expect the cooperation of their peers as they teach their lessons.

The Rutgers Train the Trainer Program ends with evaluation. Both the participants and the instructors are evaluated. The participants complete a two-section multiple-choice and essay test which is based upon the instructional content of the RTTP. Based upon the results of this test, their success in practice teaching, and the degree and quality of their participation in the training program, we make recommendations regarding the certification of these trainers to the Rutgers Department of Government Services. In turn, the participants evaluate us, the instructors. They rate us on seventeen dimension of the program on a numeric scale with a range of 1 to 5, a score of 5 being the highest. Typically, we receive overall numeric scores of 4.7 to 4.9. The students also offer written comments. Some of their comments have included:

"This course is too short. We learned a lot but I'd like to learn more."

"It was so nice that we learned together as a group. It really helped."

"Good course--especially the part about using questions."

We believe that our approach to teaching these noncareer teachers is a successful one. We are able to achieve our goals and objectives: our students do acquire knowledge and skills

related to teaching; they experience "nonlecture" teaching through our modeling of the three basic teaching strategies; and they have the opportunity to practice what they have learned in a non-threatening environment. There are also other outcomes of this training program, outcomes which are perhaps even more important for these novice non-career teachers: the prospective teachers get a good feeling about teaching and they have a positive experience as members of the RTTP group.[13] The participants in this training program begin as individuals but quickly become members of a cooperative group who are working together to learn and practice the skills of teaching. A common reaction of the participants is to say, "We're a great group!"

The results of the favorable evaluations and outcomes indicate that the RTTP is a success. Further detailed field studies and interviews could prove helpful in indicating to what degree "graduates" implement the skills of effective teaching learned during the two-day program. However, even without such data it is worthwhile to speculate on the factors which contribute to the success. It would be possible to attribute some degree of causation to the factor of "Rutgers retreat atmosphere." This is to say, many of the participants are impressed and influenced by the fact that they are coming onto the campus of Rutgers University, the State University of New Jersey and spending two days at the Continuing Education Center. In this retreat-like situation meals, classes, and activities all take place within a self-contained, well-run, well-equipped

building. While this factor no doubt leads students to respond positively, it is not the dominant factor to account for the success of the RTTP.

Other factors also contribute to the success of the program. These factors include: the conscious involvement of the participants in activities and discussion; the support each participant receives from us as professionals and from the other participants; the esprit de corps which develops as the participants discuss together in a whole group and work together in small groups; the novelty and freshness of learning fundamental teaching strategies and tactics; the interaction with university professors, people whom some participants have never before met and others have never associated with at meals and during activities; the variety of groupings and the association with similarly inclined prospective non-career teachers; and the experience of an unexpected structured activity (a set of lecture sessions is expected) which yields an "ah ha" discovery feeling of insightful learning.

For us, the single most significant factor is our modeling of effective teaching strategies and tactics with the participants so they can experience for themselves an exciting and positive approach to teaching. Perhaps the participants cannot always or even often articulate what it is that strikes them as the special factor accounting for the success of the RTTP. No matter. The participants experience it, feel it, and have a model to emulate and not just an exhortation to recall and

not just an urging to heed. Their experience bears witness to what they implicitly and tacitly know from their many days as formal students ever since kindergarten--teaching can be exciting, can be effective, can be rewarding, can be adapted to suit the needs of the various students, and can be performed with skill and humaneness.

What is significant, then, is that the RTTP is sound theoretically for adult participants and that its implementation is congruent with its goals, underlying theoretical principles, and objectives. Sound theory and an implementation which is congruent with that theory leads to success. Under this condition, the participants experience a teacher-student interaction which creates a positive and powerful impression for them to take away from Rutgers so as to guide their future teaching action. In short, the RTTP is founded on an understanding of the nature of effective teaching, of the characteristics of adult students, of the needs of noncareer prospective teachers, and of an implementation approach centered on mutuality and jointness of purpose. The integration of the RTTP elements into a harmonious whole yields success and satisfaction.

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